

Application No.: 09/974,514

Docket No.: JCLA8093-R

REMARKS**Present Status of the Application**

The Advisory Action mailed on April 4, 2005 rejected claims 8 and 12-16 under 35 U.S.C. 102(e), as being anticipated by Maeda et al. (US 6,262,961, hereinafter Maeda).

In response thereto, Applicant has amended claims 8 and 12-15, canceled claim 16, and added new claims 17-22 to more clearly describe the claimed invention. The amendments to independent claim 8 include the contents of canceled claim 16, and can be supported by paragraphs [0166]-[0168] and [0183]. The subject matters of new independent claim 17 are well supported at FIGs. 10A and 10B, and paragraphs [0164], [0169] and [0170]. Therefore, it is believed that no new matter is added by way of amendments to claims. Reconsideration of pending claims 8 and 12-15 and consideration of new claims 17-22 are respectfully requested.

Discussion of Rejections of Claims 8 and 12-15 under 35 U.S.C. 102(e)

Claims 8 and 12-16 were rejected under 35 U.S.C. 102(e) as being anticipated by Maeda. Please note that Applicant has amended claims 8 and 12-15 and canceled claim 16.

Applicant respectfully submits that the rejections can be overcome with the amendments, since anticipation under 35 U.S.C. 102 requires that each feature be disclosed by a single prior art but Maeda fails to teach or disclose each feature of amended independent claim 8.

Specifically, in amended independent claim 8 of this invention,

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- i) a control device and a driving device work together to generate a driving force of a first magnitude *larger than zero* but *insufficient* for transferring the recording medium *before* the loading start position, and to generate a driving force of a second magnitude *sufficient* for transferring the recording medium *after* the loading start position; and
- ii) the recording medium transfer mechanism transfers the recording medium with the *combined force* of the insertion force of the operator and the driving force of the first magnitude *before* the loading start position, and with *only* the driving force of the second magnitude *after* the loading start position.

However, Maeda fails to disclose or teach the above features of amended claim 8.

According to FIG. 11 and related descriptions in Maeda and page 3 of the Final Office Action issued on 12/24/2004, in the disk loading device of Maeda, the control device performs, under certain conditions, a control process such that the driving device generates a driving force having a magnitude that the recording medium transfer mechanism is not operated, such that the loading action is *stopped* or *prohibited*. *On the contrary*, in amended claim 8 of this invention, the driving force of the first magnitude that is larger than zero but insufficient for transferring the recording medium is for *assisting* the operator to load the recording medium, because the recording medium is transferred with the combined force of the driving force of the first magnitude and the insertion force of the operator between the eject position and the loading start position.

Moreover, in Maeda, a stop or prohibition of a loading action means that something wrong has been detected, so that the loading action will not be continued to completion after the

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previous driving force for stop or prohibition is applied. That is, *no driving force of another magnitude* capable of loading the recording medium is applied after the previous driving force for stop or prohibition. *On the contrary*, in amended claim 8 of this invention, a driving force of a second magnitude is applied after the previous driving force of the first magnitude to continue loading the recording medium.

Accordingly, Maeda and claim 8 of this invention focus on entirely different aspects in disk loading operation. Briefly speaking, Maeda focuses on the judgment of whether the loading action should be continued or not and on the response to the result of the judgment: if the loading action is judged to be stopped or prohibited, zero force or even *a resistance* against the insertion is applied to prevent loading; otherwise, if the loading action is judged to be continued, a normal loading force is applied to load the disc. That is, in Maeda, *either* the first force (zero force or a resistance against the insertion) *or* the second force (normal loading force) is applied in a single operation. On the other hand, claim 8 of this invention focuses on the loading process from the eject position to the loaded position, wherein two driving forces having different magnitude are *sequentially applied in the same insertion direction* with the loading start position as a switching point.

For at least the foregoing reasons, Applicant respectfully submits that the amended independent claim 8 and claims 12-15 dependent form claim 8 patently define over Maeda. Reconsideration and withdrawal of the rejections to claims 8 and 12-15 is respectfully requested.

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Discussion of New Claims 17-22

New claims 17-22 are also novel and non-obvious over Maeda, because Maeda fails to disclose or teach a recording medium loading apparatus comprising at least

"a disc detecting switch, for receiving and transferring a recording medium between an eject position and a loaded position, wherein when an inserted recording medium comes in physical contact with the disc detecting switch, the disc detecting switch is turned on, otherwise the disc detecting switch is turned off; and a control device for controlling the driving device of the recording medium transfer mechanism according to the status of the disc detecting switch"

as required by independent claim 17. According to the specification, the advantage of the above features is that at least when a wrong-size disc is inserted in the recording medium transfer mechanism, the wrong-size disc will not press the disc detecting switch and the disc detecting mechanism is not turned on, which will in turn render the recording medium transfer mechanism non-operational and therefore the wrong-size disc will not be loaded into the recording medium loading apparatus. Thus, the operator would become aware that a wrong-size disc has been mistakenly inserted in the recording medium transfer mechanism, and the operator could remove it and replace it with a proper-size disc. Thus, not only the loading time of the wrong-size disc is saved but also the damage due to loading a wrong-size disc into the recording medium loading apparatus can be effectively avoided.

Instead, Maeda substantially discloses, in FIG. 11, the use of the switches XCTL (114) and XOP (115) for detecting the recording medium type. Furthermore, Maeda substantially discloses

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the operation of the switches 114 and 115 in lines 46-49 of col. 14, FIG. 5, and lines 24-31 of col. 15, wherein the protrusion 108b of the linkage plate 108 normally turns on the switch 115 provided in the flexible board 113 and immediately turns off the switch 115 when the linkage plate 108 rotates due to the rotation of the inlet lever 107. Meanwhile, when the shutter opener 103 is abutting against the bare disc 301, the switch 114 is turned off; and when the bare disc 301 is pushed in slightly so as to extend the rear end of the disc holder 104, the protrusion 103e of the shutter opener 103 turns on the switch 114.

In other words, Maeda fails to teach, disclose or hint a disc detecting switch that turns on when the *inserted recording medium* comes in physical contact with the switch, and turns off when not in contact with the inserted recording medium disc. *Instead*, Maeda substantially teaches that the protrusion (108b) of the *linkage plate (108)* normally turns on the switch (115) provided in the flexible board (113) and immediately turns off the switch (115) when the *linkage plate (108)* rotates due to the rotation of the inlet lever (107), and teaches that when the *shutter opener 103* is abutting against the bare disc 301, the switch 114 is turned off and when the bare disc 301 is pushed in slightly so as to extend the rear end of the disc holder 104, the protrusion 103e of the *shutter opener 103* turns on the switch 114. Therefore, it is clear that the structure of the recording medium transfer mechanism having a disc detecting switch of claim 17 is quite different from that of Maeda, and therefore Maeda cannot possibly anticipate new claim 17.

Furthermore, Maeda substantially teaches that when the cartridge (300) or the disc is inserted into the holder (100), the detecting means will detect the recording media type. In a case when the cartridge is inserted in a wrong direction, the cartridge is prevent from being inserted by

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the preventive rib 102a so that the movement of the holder 100 is restrained from being inserted into the apparatus (please see lines 42-56 of col. 21). In addition, after the completion of insertion of the cartridge 300 into the holder 100, the two switches 114 and 115 will release the restraining force on the holder 100 so that the holder may be easily transferred into the base 8 (please see lines 1-7 of col. 23). Accordingly, not only the structure, but also the mechanism and the operation of the recording medium transfer mechanism of Maeda are quite different from those of the recording medium transfer mechanism of new claim 17. Therefore, Maeda cannot possibly anticipate new independent claim 17 in this regard.

For at least the above reasons, Applicant respectfully submits that new independent claim 17 and new claims 18-22 dependent directly or indirectly from independent claim 17 are all patentable over the prior art.

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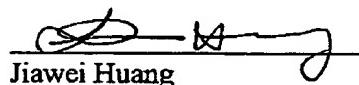
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CONCLUSION

For at least the foregoing reasons, it is believed that pending claims 8, 12-15 and new claims 17-22 are in proper condition for allowance. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is hereby invited to telephone the undersigned counsel to arrange for such a conference.

Respectfully submitted,
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